Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for ~~analyzing~~ applying a motion effect using between two input images, comprising:

generating a single channel image for each of two input images according to a function that measures, for each pixel, occurrence of a desired characteristic, other than luminance alone, in the input images at each pixel location to provide a single value for each output pixel in the single channel image from a range of values that represent a likelihood of the occurrence of the desired characteristic; ~~and~~

computing an estimate of motion of the desired characteristic between the two input images using ~~a gradient-based method that uses~~ based on the single channel images generated for the two input images ~~and a constraint that a total of the desired characteristic is constant from one image to a next image~~; and

processing at least one of the two input images to generate an output image that includes a motion-based effect, wherein the processing uses the computed estimate of motion of the desired characteristic.

2. (Original) The method of claim 1, wherein the desired characteristic is edge magnitude.

3. (Currently Amended) The method of claim 1, wherein the desired characteristic is proximity to a color; and the function measures the proximity to a color of a region around each pixel location.

4. Cancelled.

5. (Currently Amended) The method of claim 1 [[4]], ~~further comprising:~~ wherein performing the motion-based effect includes generating several images from the two input images according to an interpolation of ~~using~~ the computed estimate of motion over time to interpolate between the two images.

6.   (Original) The method of claim 5, wherein the desired characteristic is edge magnitude.

7.   (Currently Amended) The method of claim 5, wherein:
        the desired characteristic is proximity to a color; and
        the function measures the proximity to a color of a region around each pixel location.

8.   (Currently Amended) An apparatus for ~~analyzing~~ applying a motion effect using between two input images, comprising:
        means for generating a single channel image for each of two input images according to a function that measures, for each pixel, occurrence of a desired characteristic, other than luminance alone, in the input images at each pixel location to provide a single value for each output pixel in the single channel image from a range of values that represent a likelihood of the occurrence of the desired characteristic; and
        means for computing an estimate of motion of the desired characteristic between the two images using ~~a gradient-based-method that uses~~ the single channel images generated for the two input images and ~~a constraint that a total of the desired characteristic is constant from one image to a next image;~~ and
        means for processing at least one of the two input images to generate an output image that includes a motion-based effect, wherein the processing uses the computed estimate of motion of the desired characteristic.

9.   (Original) The apparatus of claim 8, wherein the desired characteristic is edge magnitude.

10.   (Original) The apparatus of claim 8, wherein the desired characteristic is proximity to a color.

11.   Cancelled.

12.   (Currently Amended) The apparatus of claim 8 ~~11~~, ~~further comprising:~~ wherein the means for performing a motion-based effect includes means for generating several images from

the two input images according to an interpolation of the computed estimate of motion over time interpolate between the two images.

13.   (Currently Amended) The apparatus of claim 12 11, wherein the desired characteristic is edge magnitude.

14.   (Currently Amended) The apparatus of claim 12 11, wherein;

    the desired characteristic is proximity to a color; and

    the means for generating measures the proximity to a color of a region around each pixel location.

15-16. Cancelled.

17.   (Currently Amended) The method of claim 1, wherein computing the estimate of motion uses a gradient-based method that uses the single channel images generated for the two input images and a constraint that a total of the desired characteristic is constant from one image to a next image, and wherein the gradient-based method comprises computing optical flow for the single channel images.

18.   (Previously Presented) The apparatus of claim 8, wherein the means for computing uses a gradient-based method that uses the single channel images generated for the two input images and a constraint that a total of the desired characteristic is constant from one image to a next image, and wherein the using a gradient-based method includes comprises means for computing optical flow for the single channel images.

19.   (Currently Amended) The method of claim 17, wherein the gradient-based method comprises computing, for each pixel in an image, a vector that describes the motion for the pixel from one image to the next.

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20. (Currently Amended) The apparatus of claim 18, wherein the means for computing using a gradient-based method comprises means for computing, for each pixel in an image, a vector that describes the motion for the pixel from one image to the next.

21. (Currently Amended) The method of claim 17, wherein the gradient-based method comprises using an optical flow constraint equation.

22. (Currently Amended) The apparatus of claim 18, wherein the means for computing using a gradient-based method comprises means for using an optical flow constraint equation.